

ABSTRACT OF THE DISCLOSURE

An object of this invention is to enable performing accurate DC recovery operation for an output signal from an image sensing element, and obtaining a high-quality image free from any image degradation such as a horizontal streak. To achieve this object, an image sensing apparatus includes first and second clamping circuits on the output side of an image sensing element. The image sensing element outputs a signal from an effective pixel region, a first reference signal for DC recovery of an image signal that is set for each row, and a second reference signal that is uniformly set for the pixel region. The first clamping circuit DC-recovers a signal from the effective pixel region for each row on the basis of the first reference signal. The second clamping circuit uniformly DC-recovers signals from the effective pixel region for the pixel region on the basis of the second reference signal. The first reference signal is a signal obtained in a horizontal reference region free from any influence of an output from the photodiode of the image sensing element. The second reference signal is a signal which is obtained in a vertical optical black region and contains a dark current component generated in the photodiode of the image sensing element.